

DRAFT

ORDER

6050.22D
9/11/98

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

**S U B J: RADIO FREQUENCY INTERFERENCE INVESTIGATION AND REPORTING
(RIS: 6050-16)**

1. PURPOSE. This order prescribes procedures for investigating and reporting radio frequency interference (RFI) affecting the National Airspace System (NAS)

2. DISTRIBUTION. This order is distributed to the division level within the Office of the Chief Council, Airways Facilities, Air Traffic, Flight Standards, Office of Communications, Navigation and Surveillance Systems, and the Office of Civil Aviation Security Operations in Washington headquarters; to branch level within the regional Airway Facilities, Air Traffic, Flight Standards, Civil Aviation Security, and the Office of Chief Council; and to all Airway Facilities, Air Traffic, Flight Standards, and Civil Aviation Security field offices with a maximum distribution.

3. CANCELLATION. Order 6050.22C, Radio Frequency Interference Investigating and Reporting (RIS: AF 6050-16), dated July 13, 1992, is canceled.

4. BACKGROUND. In order to maintain a safe and efficient NAS, it is imperative to control air traffic in an environment that is free of harmful radio frequency interference (RFI). The Office of Spectrum Policy and Management, Spectrum Assignment and Engineering Division, ASR-100, serves as the national focal point for the investigation and resolution of RFI affecting the NAS.

5. EXPLANATION OF CHANGES. This revision includes procedures for reporting radio frequency interference to Global Positioning System (GPS) devices as described in Order 6000.48, and eliminates the use of FAA Form 6050-3.

6. REFERENCE. Order 6000.48, General Maintenance Handbook for Automated Logging.

7. PROCEDURES. In accordance with the latest edition of Order 6050.32, Spectrum Management Regulations and Procedures Manual, Airway Facilities (AF) System Management Offices (SMO) will designate an SMO spectrum coordinator. The following steps shall be taken to discharge spectrum management responsibilities involving RFI:

a. Repeated Unintentional RFI. Upon receiving a report from Air Traffic (AT) of repeated interference, AF SMO personnel shall:

(1) Immediately attempt to identify the RFI source and follow the steps below:

(2) If the source is identified and the AF SMO personnel or spectrum coordinator believe it to be safe and reasonable to contact the party or person(s) responsible for the source of interference without placing themselves in danger (e.g., the source is another government entity within the United States), they shall initiate such contact. The party or person(s) should be advised of the interference and requested to resolve and terminate the RFI.

(3) If the source is identified and the AF SMO personnel or spectrum coordinator believe it to be unsafe or unreasonable to contact the party or person(s) responsible for the source of the interference or are otherwise unable to contact the person(s) responsible, without placing themselves in danger, or if contact is made and the party or person(s) do not terminate the interference, notify the Regional Frequency Management Officer (FMO), AXX-470, immediately.

(4) If the source is not immediately identified, the AF SMO office involved shall immediately notify the regional FMO. The regional FMO will analyze each unresolved report and determine the action required to expedite resolution.

(5) Report all cases of RFI (resolved and unresolved) to the regional FMO within 24 hours of receipt of the report from AT.

(6) If the interference significantly degraded the facility operation, resulted in a facility outage, or contributed to an air traffic operational error, pilot deviation, mid-air collision or near mid-air incident, immediately notify the National Maintenance Coordination Center (NMCC), FTS (703) 904-4487, and the regional FMO. During non-regular work hours, notify the regional FMO via the Regional Operations Center (ROC). The regional FMO will immediately notify ASR-100 which will determine whether headquarters or special support will be provided.

(7) Notify the regional FMO for all interference cases requiring international coordination which will be referred to ASR-100.

(8) Coordinate with regional FMO for notification to the Federal Communications Commission (FCC) field engineering offices and monitoring stations involvement.

(9) If aircraft support is necessary, ASR-100 will approve all regional FMO requests for such support from the flight inspection field offices after all other RFI resolution methods have been exhausted. ASR-100 will request AVN Flight, Inspection Central Operations Office (FICO) at (405) 954-0302 to schedule an aircraft to support the investigation. Aircraft support from the FAA Technical Center may also be requested through ASR-100 on a secondary basis.

(10) When non-commissioned facilities experience RFI problems, the regional AF NAS Implementation Center engineer, ANI-XXX, shall notify the regional FMO who will determine the action required to investigate and resolve the RFI problem.

b. Deliberate or Intentional RFI ("Phantom Controller"). Phantom controller-type RFI is defined as unauthorized, deliberate, or intentional transmissions by an individual directed to aircraft or air traffic controllers, with the intent of redirecting or giving clearance to an aircraft, or disrupting in any way the normal flow of air traffic control duties. Due to the differences in each situation, every deliberate RFI incident will need to be handled individually. The following personnel/offices shall perform the duties listed below when a phantom controller incident occurs. These duties also clarify the procedures described in the Interagency Agreement between FAA, FBI, and FCC. See Appendix 1, for additional guidance on how to handle phantom controller incidents.

(1) FAA Supervisory Air Traffic Control Specialist (SATCS) shall:

(a) Notify the Spectrum Assignment and Engineering Division, (ASR-100), the National task Force Coordinator (TFC).

(b) If false information or phantom air traffic control clearances are targeted at a specific aircraft, advise the target aircraft of the phantom controller situation and issue appropriate information/clearance.

(c) Broadcast an alert on all frequencies to all aircraft within threatened area. Example: "Attention all aircraft. Phantom air traffic control instructions have been heard at Long Beach airport Tower frequencies by arriving aircraft. False instructions have been heard on the local control frequency 118,500 MHz. All aircraft exercise extreme caution on all frequencies and verify all air traffic instructions."

(d) Collect all information pertinent to the incident, e.g., what was said; time; male or female voice, etc., whether transmission was heard by pilots only, controllers only, or both.

(e) Ensure the air traffic control tower (ATCT), or air route traffic control center (ARTCC), or automated flight service station (AFSS) tape in use is removed from normal rotation and safeguarded for use in a potential criminal investigation and prosecution. The tape need not be immediately changed or removed. The information on the tape could be critical in identifying the phantom controller.

(2) FAA (National) Task Force Coordinator (TFQ) shall:

(a) Contact the ROC or the Washington Operations Center (WOC) to set up a conference call with as many of the organizations listed in Appendix I as possible to assess the incident and to determine if the Task Force will be activated.

(b) If it is decided not to activate the Task Force, the TFC will notify the ROC or WOC and the NMCC and will continue to coordinate to ensure appropriate monitoring in case of farther incidents.

(c) Notify FCC Headquarters Enforcement Division.

(d) Ensure proper action is taken to locate the phantom controller.

(e) Provide additional guidance and resources to the Task Force as necessary.

(3) The AF SMO Manager shall:

(a) Chair the conference call initiated by the TFC, take action (with input from the conferees) to verify if the reported interference was in fact a phantom controller incident, and summarize the team's decisions concerning what measures shall be taken at that time.

(b) Notify the NMCC, of the phantom controller incident (See Appendix 1, Task Force Membership list) if it is determined to be dangerous to air traffic, is continuing, or has established a periodic pattern.

(c) Designate a time and place for the task force to meet upon activation.

(d) Continue to be the National Task Force local designee and focal point throughout the investigation.

(e) Notify and coordinate with local, FCC personnel if the regional FMO is not available.

(4) FAA Regional FMO shall:

(a) Assist the National TFC as necessary in the effort to verify that the reported interference was in fact a phantom controller incident.

(b) Assume the duties of the AF SMO Manager as described above if he or she is not available and chair the conference call.

(c) Notify and coordinate with the appropriate FCC district office, field engineering office, and monitoring station ensuring the phantom controller incident.

(d) Notify the Spectrum Assignment and Engineering Division, ASR-100 of any new developments.

(e) Participate with the FCC in the on-site investigation providing proper equipment and direction-finding capabilities.

(5) Local AF SMO personnel shall:

(a) Provide on-site assistance at airports or local area during investigation as necessary.

(b) Coordinate communications between the direction finding teams (FAA, FCC, etc.) and AT controllers and facilities.

(6) CAS division managers shall:

(a) Ensure there is a regional security specialist available when phantom controller incidents occur.

(b) Ensure the ROC has a current telephone listing of those specialists.

(c) Notify headquarters personnel of any phantom controller incident and when support is needed.

(7) Regional Security Specialist shall:

(a) Assist as necessary in the effort to verify that the incident or reported interference was in fact a phantom controller as the representative of the CAS division manager.

(b) Assume the duties of the AF SMO manager as mentioned above (b(3)) if neither the AF SMO manager, nor the regional FMO, nor their designees are available and chair the conference call.

(c) Coordinate with Federal, State, and local law enforcement agencies for the potential criminal investigation of the phantom controller incident, or participate in the conduct of the resultant criminal investigation.

(d) Advise appropriate parties regarding the proper handling of sensitive information; e.g., proper handling and preservation of evidence.

(8) ASR-1 00 assumes the role of National Task Force Coordinator (TFQ and shall-:

(a) Notify FCC Headquarters Enforcement Division.

(b) Ensure proper action is being taken to locate the phantom controller.

(c) Provide additional guidance and resources to the task force team when necessary.

c. Global Positioning System RFI. Interference with the GPS signal-in-space, or the radio frequencies associated with the ground-based augmentations to the Global Positioning System, whether intentional, unintentional or repeated, is of significant interest to the FAA. Radio Frequency Interference to space based navigational systems, such as GPS, has the potential to affect wide areas of the NAS and must be reported, investigated, and mitigated in a timely manner.

(1) Upon receipt of a report from Air Traffic (AT) of GPS RFI, AF SMO personnel shall:

(a) Immediately attempt to identify the RFI source.

(b) If the source is identified and the AF SMO personnel believe it to be safe and reasonable to contact the parties or the person(s) responsible for the source of the interference (e.g., the source is another government entity within the United States), initiate such contact and advise the person(s) of the interference, and request that the interference be terminated.

(c) If the source is identified and the AF SMO personnel believe it to be unsafe or unreasonable to contact the party or person(s) responsible for the source of the interference or are otherwise unable to contact the person(s) responsible, or if contact is made and the person(s) do not terminate the interference, notify the Regional FMO, AXX-470, immediately.

(d) If the source is not immediately identified, notify the regional FMO within 24 hours.

(e) If the interference impedes the use of an instrument procedure or airway, significantly degraded facility operation, resulted in a facility outage, or contributed to an air traffic operational error, pilot deviation, mid-air collision, or near mid-air incident, notify the NMCC and the regional FMO immediately. During non-regular work hours, AF SMO personnel shall notify regional FMO via the Regional Operations Center (ROC).

(f) Notify the regional FMO of all instances of GPS RFI (resolved and unresolved) within 24 hours of receipt of the report from AT unless required to do so earlier.

(2) Upon receipt of a report of GPS RFI, the FMO shall:

(a) If the source of the interference is unidentified, or if the source of interference is identified but the interference has not been resolved, analyzed the report and determine the action required to expedite resolution.

(b) If the interference impeded the use of an instrument procedure or airway, significantly degraded facility operation, resulted in a facility outage, or contributed to an air traffic operational error, pilot deviation, mid-air collision, or near mid-air incident, notify ASR-1 00 immediately.

(c) If international coordination is required for any reason whatsoever, notify ASR-100 immediately.

(d) Coordinate with the Federal Communications Commission (FCC) field engineering offices and monitoring stations for participation in the RFI investigation as necessary.

(e) ASR-100 will validate all regional FMO requests for aircraft support. After all other RFI resolution methods have been exhausted; ASR-1 00 will request AVN Right inspection Central Operations (FICO, 405-954-0302), to schedule an aircraft to support the RFI investigation.

(f) Assist in the airborne investigation and the resolution of the interference as necessary.

(3) When non-commissioned facilities experience GPS RFI problems, the regional AF NAS Implementation Center, ANI-XY-X, shall notify the regional FMO immediately for investigation.

Stanley Rivers
Director of Airway Facilities

ATTACHMENT I

IMPLEMENTATION PROCEDURES

I. NOTIFICATION PROCEDURES/FAA ASSESSMENT OF SITUATION

A. AIR TRAFFIC/SUPERVISOR

1. When a controller becomes aware of an unidentified transmission incident, the controller will notify the appropriate supervisor, who will in turn notify the Spectrum Assignment and Engineering Division, (ASR-100) (FAA National Task Force Coordinator (TFC)).

2. If incident occurs after hours, the Air Traffic Supervisor will notify the Regional Operations Center (ROC) and ask that the following personnel be notified:

- a. TFC.
- b. FAA Regional Frequency Management Office (FMO).
- c. FAA Headquarters National Maintenance Coordinator Center (NMCC) – (703) 904-4487.
- d. Washington Operations Center (WOC) 9 - (202) 267-3333.

B. FAA (NATIONAL) TASK FORCE COORDINATOR (TFC)

Once the TFC is notified, the TFC will contact the ROC or the WOC to set up a conference call with as many of the organizations listed below in order to assess the incident and to determine if the Task Force will be activated:

1. Regional Air Traffic Division
2. Regional FMO
3. Regional Civil Aviation Security (CAS) Specialist
4. Local AF Manager
5. Local AT Manager
6. Local FS Manager
7. Local FCC Engineer in Charge

Generally, the Task Force will be activated if it is determined that the transmissions are

- (a) deliberate or intentional,
- (b) directed to aircraft or air traffic controllers,
- (c) disrupting the normal flow of air traffic control duties, and
- (d) present a safety issue.

If it is decided not to activate the Task Force at this time, the TFC will notify the ROC or WOC and the NMCC and continue to coordinate to ensure appropriate monitoring in case of further incidents. If it is decided to activate the Task Force, then the guidelines in paragraph H. A., are to be followed.

II. TASK FORCE ACTIVATION

A. If it is determine that a deliberate interference situation requiring Task force activation exists, then the (National) TFC will contact the WOC or the ROC to set up a conference call with as many of the following organizations:

1. FAA Headquarters Spectrum Policy and Management.
2. NMCC.
3. Regional Air traffic Division.
4. Regional FMO.
5. Regional Operations Center.
6. Regional Counsel.
7. Regional Security Division.
8. Regional Flight Standards.
9. FBI Headquarters Contact.
10. FCC Headquarters Contact.
11. FAA Headquarters Security.
12. Local AF, AT and FS Managers.

(THE ACTIVATION OF THE TASK FORCE SETS OTHER ACTIONS INTO MOTION, I.E. INITIAL RESPONSE, ACTIVATION OF COMMAND CENTER)

The participants will discuss the current situation, along with a determination as to the initial response and the resources that will be sent to support the "Phantom Controller" investigation. The resources to be sent to support the investigation will be determined by the Task Force Activation Level. The levels are as follows:

1. Level 1 - Periodic pattern of deliberate interference with no ATC instructions given.
2. Level 2 - Bogus ATC instructions have begun and may continue.
3. Level 3 - Bogus ATC instructions are being transmitted on a recurring basis (highest).

B. Each agency will commit in accordance with paragraph II.,C., initial resources for the resolution of this problem. Each agency headquarters will have a local contact point on the teleconference so that all participants in the operation can better understand their roles and responsibilities.

C. The Task Force will discuss what resources are available from each agency and how they can be used when necessary. Procedures will be discussed as to where and how each resource will be brought into play by the Task Force.

D. The Task Force will also determine if a command center needs to be established at this time. The level of the Task Force activation will determine the establishment of a command center (normally if at Task Force Activation Level 3). If a command center is not established initially, then a daily teleconference will be held for updates.

III. COMMAND CENTER ACTIVATION

A. If a command center needs to be established, then the Task Force Coordinator, upon arrival on site, will make initial contact with the following persons:

1. Local AT, AF and FS managers.
2. FCC engineer who are on site.
3. Local FBI contact.

A determination will be made on the location of the command center. Ideally, the location will be in an inconspicuous place to maintain the security of the operation. Some locations could be the local AF office, AT office, or adjoining rooms at a local hotel/motel. These rooms are to be used **ONLY** for the command center activities. If hotel/motel rooms are used, security of these rooms must be maintained 24 hours a day.

Attachment 5 contains a list of recommended resources for the command center.

The local Air Traffic and Airway Facilities Managers shall be detailed to the command center until the investigation has been concluded.

B. COMMAND CENTER DAILY OPERATIONS.

The command center is one of the most important tools in assuring that an investigation is resolved successfully; therefore, the following procedures are to be used as guidelines:

1. A status briefing should be held each day, if possible, prior to deployment of any personnel, to determine the specific types and amounts of resources needed.
2. AT should provide a daily transcript of any unauthorized transmissions. This transcript will be part of the daily analysis.
3. Debriefings should be held regularly. Action items can be assigned to the appropriate persons. Only the key members should be in attendance at the briefings/debriefings. During the briefing sessions, a teleconference can be set up to bring all other necessary parties up to date. The key members are identified in paragraph B. 10, below.
4. The situation needs to be reassessed each day, to determine if, when, and what kinds of additional resources are needed, and the source of these resources.

5. Members of the command center will analyze the data. Examples of the data include the bearings that were plotted during the previous day's activities, vehicle tag numbers, comments from the engineers that were deployed, the daily transcripts, suspect list, etc.

6. As data is received by the command center's personnel, it needs to be plotted for analysis. This data can be plotted on flip charts, in computers, and/or note pads. How the data is handled will determine how useful it becomes. The command center needs good information, not just data, to complete the investigation successfully.

7. Conduct a weekly teleconference to ensure that the following organizations are kept current as to the status of the investigation:

- a. FAA Headquarters Office of Spectrum Policy and Management.
- b. FAA Regional Public Affairs.
- c. Regional FMO.
- d. Regional Operations Center.
- e. Regional Counsel.
- f. Regional Flight Standards Office.
- g. FBI Headquarters contact.
- h. FCC Headquarters contact.
- i. Appropriate Sector Manager.
- j. Regional Civil Aviation Security Division.

8. The Task Force Coordinator will be the spokesperson for the operation. No statements are to be made to the press, until the Task Force, identified in section IV of this Interagency Agreement, with the consent of the U.S. Attorney, have agreed to their content and timing. Until a successful resolution of all criminal proceedings is concluded, all legal questions shall be referred to the local U.S. Attorney's office through the local FBI coordinator.

9. The command center should be equipped with no less than the minimum number of personnel and resources recommended in Attachment 5.

10. Initially, the command center should be staffed with the following people:

- a. Task Force Coordinator
- b. Local AF Manager
- c. AT management
- d. FAA Security
- e. FCC coordinator
- f. Administrative assistance (Local AF/AT personnel)

These participants will be some of the key members of the command center's activities. The FBI coordinator will be added to the command center staffing when the FBI opens a criminal investigation of a specific incident. However, the FBI coordinator should attend all briefings/debriefings. The responsibilities of the key members are outlined in paragraph C.

C. RESPONSIBILITIES OF COMMAND CENTER KEY MEMBERS

1. TASK FORCE COORDINATOR (TFC) - The TFC shall:

- a. Coordinate Task Force activities.
- b. Collect and disseminate data and information by teleconference, reports, fax messages, or meetings.
- c. Be the spokesperson for the operation and the Task Force member representing the FAA Office of Spectrum Policy and Management, ASR-1 and the Spectrum Assignment and Engineering Division, ASR-1 00.
- d. Develop daily situation reports. These reports will be sent, by fax, to each organization.
- e. Establish lines of communications between members of the Task Force, the Task Force and headquarters organizations, and the Task Force and local law enforcement organizations.
- f. Coordinate the necessary resources for the Task Force.
- g. Coordinate the activities of the three agencies in the operation of the command center and investigation.
- h. Conduct all meetings, including the briefings and debriefings, and coordinate meetings.
- i. Develop and distribute a final report of the incidents investigated. (See Attachment 3 for a sample format.)
- j. With the help of the Administrative Assistant, keep a daily record of the activities, which should include, as a minimum, tasks completed, steps in the resolution of the investigation, assignments, resources used, resources requested, issues or problems that may have arisen from that day's activities. These records will be very useful in completing the final report and for the daily fax/teleconferences.

2. FAA SECURITY - The FAA on-site Security shall:

- a. Conduct FAA investigations
- b. Interface with other Federal and local law enforcement personnel.
- c. Assume responsibility for potential investigations
- d. Provide security guidance procedures, in conjunction with the FBI coordinator, such as the safeguarding of evidence, establishing a "chain of custody", and setting up FCC vehicles for surveillance, to the Task Force Coordinator, and as appropriate, to the entire Task Force.
- e. Assist in the development of the search and arrest warrants

3. ADMINISTRATIVE ASSISTANT - The administrative assistant shall:

- a. Answer phones-, take and route messages.
- b. Assist in the plotting of the incoming data in a format that will allow the Task Force members to easily analyze the data.
- c. Take notes of the debriefings/briefings
- d. Establish files for information and data collection
- e. Ensure adequate administrative supplies are on hand

The administrative assistant will be a valuable resource during the operation and should aid in the development of the final report and the activities leading to the Task Force final debriefing.

4. LOCAL AIR TRAFFIC MANAGEMENT - The local AT Manager shall:

- a. Act as the liaison between the command center activities and operations with the Air Traffic Controllers.
- b. Determine the feasibility of certain operations in the Air Traffic Facilities to ensure that safety is maintained at all times during the operation
- c. Assist the Task Force during the investigation

5. LOCAL AF MANAGEMENT - The local AFSFO Manager shall:

- a. Act as the liaison between the activities and operations of the command center and the local AF office during the investigation.
- b. Be the source of detailed information on incidents
- c. Coordinate the support of the AF technicians and logistics personnel.

6. FBI COORDINATOR - The FBI coordinator shall -.

- a. Review the complaint with the U. S. Attorney's office for possible violations.
- b. Investigate, under FBI procedure, to identify and prosecute perpetrators.

- c. To the extent allowed by law, provide results of the investigation to FAA Security Office and to the Task Force, during the investigation.
- d. Develop the required warrants, based on evidence from the FCC and FAA.
- e. Provide technical guidance, in conjunction with the FAA on-site security coordinator, to the Task Force relating to evidence, specifically, what evidence is required, how to **safeguard the evidence, and other legal** guidance via the local U.S. Attorney's office.
- f. Provide and coordinate the FBI assets, i.e., the deployment of FBI agents for the purpose of surveillance, tag runs, and the actual arrest of the suspect.
- g. Attend all briefings and debriefings or designate an alternate
- h. Assist the U.S. Attorney, FBI, and FCC in securing any equipment that may have been used by the suspect to preclude any damage or loss of evidence.
- i. Exercise lead agency authority in the conduct of the criminal investigation.

The FBI will be a valuable asset in the command center as the investigation progresses toward an arrest.

7. FCC COORDINATOR - The FCC Coordinator shall:

- a. Be the FCC's liaison between the FCC engineers, the command center and the local AT/AF operation.
- b. Direct the daily operation and deployment of the FCC personnel during the investigation.
- c. Provide DF guidance to the local FAA office, if necessary.
- c. Ensure that & FCC's operation has the necessary resources. The FCC coordinator will provide a list of the required resources to the TFC.
- e. Assist with the development of the search and arrest warrants.
- f. Ensure that the electronics evidence is analyzed and discussed at the daily briefings.

g. Designate a team of FCC personnel for the purpose of assisting the U.S. Attorney and FBI in securing all of the suspect's equipment in such a way that no evidence is destroyed.

IV. COMMAND CENTER DEACTIVATION

When the TFC determines there will be no further threats, the command center will be deactivated. Therefore, the following action can be taken.

A. The local AF and AT managers can be released from their detail to the command center.

B. FCC can release the agents, vehicles, and equipment.

C. The administrative assistant must take the following action:

1. Ensure that all files are intact and secure.
2. Once these files are secure, arrange to have them transported to the TFC's office to be used for developing the final report and preparing for the interagency debriefing.

D. FAA Security and the FBI coordinator will ensure that all evidence is secure.

E. The TFC will advise the following persons that the command center has been deactivated:

1. FAA Headquarters Office of Spectrum Policy and Management
2. Regional Air Traffic Division
3. Regional Frequency Management Office
4. Regional Security Division
5. Regional Public Affairs
6. Regional Counsel
7. Regional Operations Center
8. Systems Management Office
9. Sector Manager

F. FAA Security and the FBI Coordinator will ensure that data gathered during the investigation, that will not be used as evidence, is properly stored or destroyed. No data gathered during a criminal investigation will be destroyed without the explicit approval of the U.S. Attorney's office.

G. All other equipment must be accounted for and can be returned to the appropriate locations.

An interagency Task Force debriefing shall take place not later than two weeks after the command center has been deactivated.

V. TASK FORCE DEACTIVATION

Once the command center is deactivated, the next task is to deactivate the Task Force.

However, the TFC should continue monitoring alert bulletins for possible “copy cat” transmissions. If “copy cat” transmissions occur, then the procedures in this attachment will be utilized again.

Before the Task Force is deactivated, the interagency debriefing must be held. Items coming from this meeting will be used a part of the final report. The interagency debriefing will include such discussion items as follows:

- A. Performance
- B. Problems/Solutions
- C. Recommendations
- D. Action Items

The TFC will advise the office, as shown in paragraph IV.E, that the Task Force has officially been deactivated.

The final report should be distributed to the organization, as shown in Attachment 4, no later than 60 days after the interagency debriefing concludes.

ATTACHMENT 2

HEADQUARTERS CONTACT POINTS

The following Washington Headquarters offices shall be the focal point for all matters regarding this Interagency Agreement:

1. GERALD J. MARKEY
DIRECTOR, OFFICE OF SPECTRUM POLICY AND MANAGEMENT
FAA, 800 INDEPENDENCE AVE. SW
WASHINGTON, DC 20591
TELEPHONE: (202) 267-9738

2, DANIEL EMRICK
FCC, ROOM 744, STOP 1500 EI
1919 M. STREET, NW.
WASHINGTON, DC 20554
TELEPHONE: (202) 418-1175

3. CHIEF, INTERSTATE THEFT AND RESERVATIONS CREMES UNIT
FEDERAL BUREAU OF INVESTIGATIONS
IOTH AND PENNSYLVANIA AVE. NW.
WASHINGTON, DC 20535
TELEPHONE: (202) 324-4199

24 HOUR OPERATIONS COMMAND CENTER # (202) 324-6700

ATTACHMENT 3

SAMPLE FORMAT FOR FINAL REPORT

The format for the final summary should be printed with the following sections:

Table of Contents

Section I	Executive Summary
Section 2	Actual Events
Section 3	Transcripts From Taped Transmissions
Section 4	Resources Expended
Section 5	Interagency Task Force Personnel
Section 6	Final Debriefing
Section 7	Recommendations
Section 8	Publicity

ATTACHMENT 4

DISTRIBUTION OF THE FINAL REPORT

The final report will be distributed to the following organizations:

1. FAA Headquarters Office of Spectrum Policy and Management
2. Regional Operations Center
3. Regional/Headquarters Chief Counsel
4. Regional and Headquarters Public Affairs
5. Regional Airway Facilities Division
6. Regional Air Traffic Division
7. Regional Civil Aviation Security Division
8. Regional Flight Standards Division
9. FBI Headquarters
10. FCC Headquarters
11. Systems Management Office
12. Local AF Manager
13. Regional AF Division Manager

ATTACHMENT 5

LIST OF RECOMMENDED RESOURCES

I. Personnel:

A. Command Center

1. Task Force Coordinator
 2. Local Air Traffic Management
 3. Local AF Management
 4. Local FS Management
 5. FAA Security Agent
 6. FCC Coordinator
 7. Administrative Assistant
 8. FBI agent(s) *
 9. Negotiator and/or someone experienced in developing suspect profiles
- * Can be added as the investigation progresses.

B. Field operation

1. FCC agent
2. FAA technicians/engineers
3. FBI agent(s)
4. FAA Security

II. Equipment

A. Command Center

1. Computers, with modems -2 preferable
2. Fax machine
3. Shredder
4. Telephones, with speaker phone capacity - 4 preferable
5. Pagers, one for each key member of the Command Center
6. FM Base Station and hand-held transceivers - Secure mode
7. Software:
 - a. FCC Computer generated City Maps Program
 - b. Spreadsheet
 - c. Database
 - d. Communications program
 - e. Word Processing

- d. Communications program
- e. Word Processing

8. Contingency Communications Support Team (CCST)

9. Photocopier

10. Secured Storage

* Can be added later, if needed

B. Field Operation

1. FM Hand held transceivers - secure mode

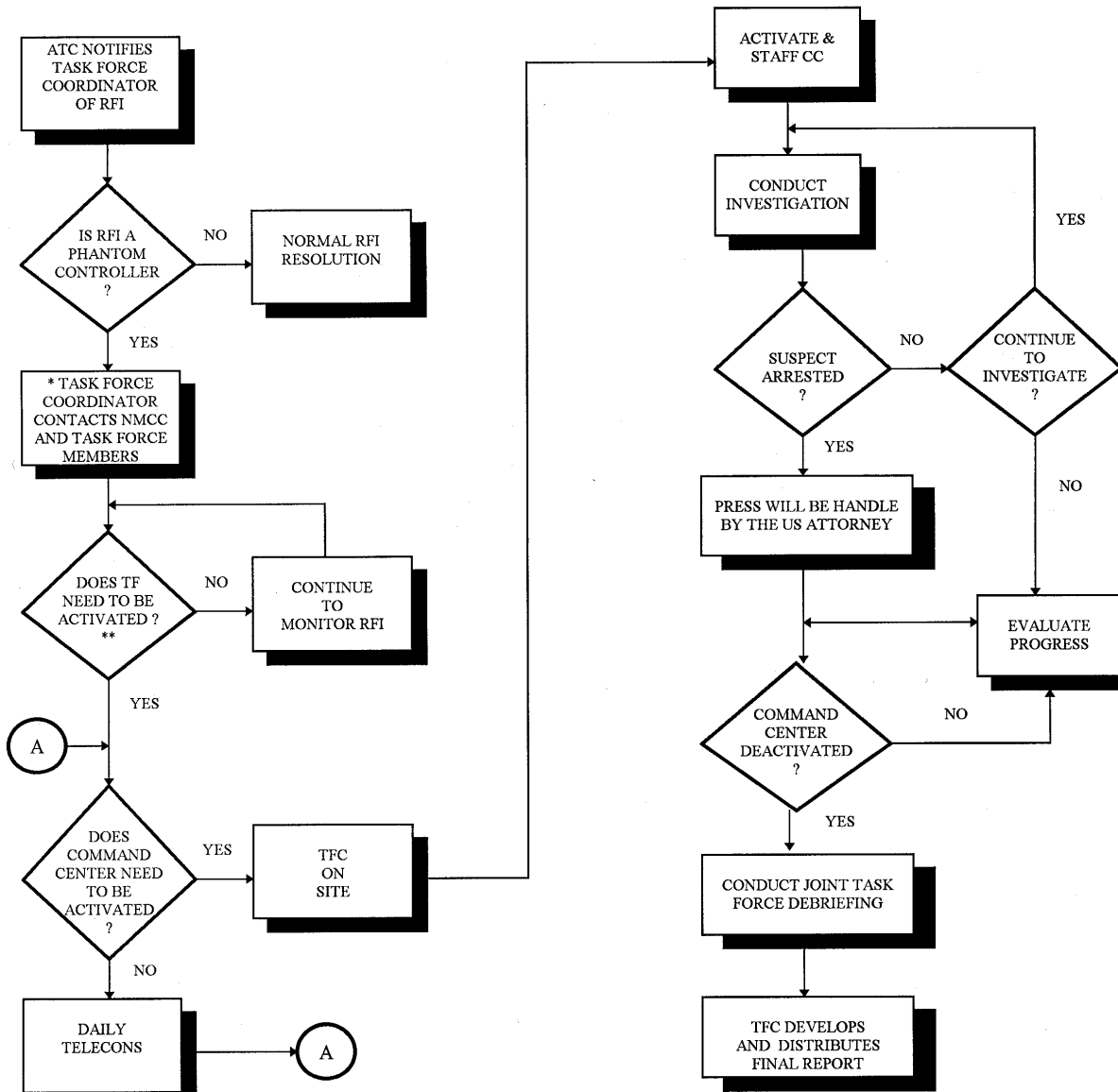
2. Pagers - one for each engineer deployed in cars working mobile DF equipment

3. Fixed DF station

4. Portable hand-held DF

5. Night scope

FLOWCHART FOR TASK FORCE / COMMAND CENTER ACTIVATION / DEACTIVATION



* FAA INTERAGENCY TASK FORCE COORDINATOR (TFC)

** FAA TFC WILL ACTIVATE THE TASK FORCE AFTER DISCUSSIONS WITH FAA HEADQUARTERS SPECTRUM ENGINEERING , REGIONAL AIR TRAFFIC, SPECTRUM MANAGEMENT OFFICE, CIVIL AVIATION SECURITY, AND FCC AND FBI HEADQUARTERS.

APPENDIX 1. INTERAGENCY TASK FORCE AGREEMENT

INTERAGENCY AGREEMENT

BETWEEN

THE DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
(FAA)

AND

THE DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATIONS
(FBI)

AND

THE FEDERAL COMMUNICATIONS COMMISSION
(FCC)

July 1, 1996

I PURPOSE:

The purpose of this interagency agreement is to outline the procedures the FAA, FBI, and FCC should follow to effectively interact in an attempt to locate, identify, and resolve any deliberate radio frequency interference (RFI) (commonly referred to as "Phantom Controller") affecting the National Airspace System (NAS). This type of RFI results when an unauthorized user attempts to interfere, or interferes, with air navigation and/or communications in violation of applicable Federal codes, statutes, and regulations.

II. BACKGROUND

It is unknown when the first unauthorized transmissions of the type described above were made. However, there has been an increased awareness of this problem since September 1986 when several occurrences were reported in the Miami, Florida, area. Since the unauthorized user usually attempts to give conflicting or erroneous air traffic control information, the phrase "Phantom Controller" has been associated with this type of activity.

The FAA, FBI, and FCC in the Miami, Florida, area developed local procedures to ensure proper notification of and facilitation of an organized response to "Phantom Controller" reports. The basis for these procedures is a Task Force concept, where specific reporting and notification procedures are used by individuals in all three agencies.

"Phantom Controller" activity has increased since 1986 and has been reported in several other parts of the country. In April 1988, a meeting of FAA, FBI, and FCC personnel took place in Washington, D.C., to begin formulating an interagency agreement to deal with the "Phantom Controller" or other deliberate interference problems. At that meeting it was decided that a Task Force concept similar to that used in Miami should be the basis for a plan that could be used throughout the country. In August 1989, the FAA, FBI, and FCC entered into an interagency task force agreement to formalize the agencies' procedures in response to "Phantom Controller" type RFI. On the basis of recent experience, this agreement is being updated to enhance the respective agencies procedures to address "phantom controller" problems.

III. AGENCY RESPONSIBILITIES:

Each agency or participant in the Task Force shall perform services and exchange information for their areas of responsibility within their own budget constraints. No exchange of accounting or billing information is needed. Each agency will participate in the Task Force as noted below.

A. FEDERAL AVIATION ADMINISTRATION

The FAA has primary responsibility for air safety and is usually first to have knowledge of any deliberate interference with air navigation and communications frequencies. Therefore, the FAA,

Spectrum Assignment and Engineering Division, (ASR-100) and his/her designee is designated as the National Task Force coordinator and will officially activate the task force, and complete the requirements set forth in section IV and attachment

In order to effectively carry out the FAA's responsibility, the FAA shall establish a Policy Committee that consists of the following members:

1. Director of Airway Facilities, AAF-1/2
2. Director of Air Traffic, AAT-1/2
3. Associate Administrator for Regulation & Certification, AVR- 1/2
4. Director for Aviation Standards, AVN-1/2
5. Office of the Chief Counsel, AGC-1/2 ~
6. Associate Administrator for Civil Aviation Security, ACS-1/2
7. Office of Airport Standards, AAS-1/2
8. Office of Spectrum Policy and Management, ASR-1/2

When the Task Force is activated, the FAA Spectrum Assignment and Engineering Division (ASR-100), or its designee shall assume the role and responsibilities of the Task Force Coordinator.

Within the FAA, the FAA Civil Aviation Security has responsibility for performing criminal investigations and initiating and participating in joint investigative efforts with other Federal and local law enforcement entities.

This effort shall be coordinated with the appropriate FBI and FCC headquarters office and may result, with the written agreement of all the parties, in revisions, additions or deletions to this interagency agreement.

B. FEDERAL COMMUNICATIONS COMMISSION

The Federal Communications Commission will provide a 24 hour-a-day response to requests for assistance from the Task Force Coordinator and do the following:

1. Provide Direction Finding (DF) capability, both mobile and fixed.
2. Provide liaison with the Task Force in investigating deliberate interference cases.
3. Provide the FAA and FBI the results of their electronic surveillance for determination of violations of Federal Criminal statutes.
4. In cases where the FBI or FAA does not have responsibility, prepare and submit evidence to the U.S. Attorney. Testify in criminal prosecution of suspected perpetrators as required. ,

5. Provide additional technical assistance, such as signal signature analysis and development of improved direction finding capabilities.

C. FEDERAL BUREAU OF INVESTIGATIONS

The FBI shall, upon receipt of a complaint from the Task Force Coordinator to a local FBI field office, refer that information to the appropriate U. S. Attorney for a determination as to the existence of a violation of the Destruction of Aircraft or Motor Vehicle statutes, Title 18, U.S. Code, Section 32 (a), 35, or other applicable criminal statutes, including, but not limited to, 49 U.S.C. 46308. If such a violation appears to exist, the FBI will conduct a criminal investigation to identify and prosecute the perpetrator of such acts. (In those cases where the FBI conducts a criminal investigation with the assistance of another agency or other agencies, the FBI will exercise lead agency authority with respect to the criminal investigation.) ,

To the maximum extent allowed by applicable law and agency procedures, the results of this investigation will be coordinated with the other agencies comprising the interagency Task Force.

The FBI shall also provide technical assistance to the interagency Task Force. This technical assistance may include the use of electronic surveillance and/or direction-finding capabilities, including the use of FBI aircraft in deliberate RFI investigations on a case-by-case basis.

IV. THE TASK FORCE CONCEPT

When a deliberate interference situation exists, the Task Force concept will be implemented which may include the activation of the Task Force and a Task Force Command Center.

The implementation and activation of the Task Force are covered in **Attachment 1 and Figure 1**.

A. RESPONSIBILITY

The Task Force shall perform those activities necessary to locate, identify, and resolve deliberate interference problems that are in violation of applicable Federal codes, statutes, and regulations.

B. STRUCTURE

The Task Force will typically consist of a minimum of the following members, representing the following organizations:

1. FAA National Task Force Coordinator.
2. FAA Local Airway Facilities Office.
3. FAA Local Air Traffic Office.
4. FAA Regional and local Aviation Security Offices.
5. FAA Regional Frequency Management Office.
6. FAA Regional Flight Standards Office.

7. Federal Communications Commission.
8. Federal Bureau of Investigation Field Office.
9. FAA Regional Counsel.
10. FAA Regional Operations Center (ROC).
11. Regional and Headquarters Office of Public Affairs.

Other members may be added to the Task Force on a case-by-case basis.

V. POINTS OF CONTACT

The Washington headquarters contacts who are, as of the date of this agreement, the focal point for matters relating to this agreement, are shown in **Attachment 2**. The names of current specific Task Force points of contact can be obtained by contacting the FAA headquarters personnel list in Attachment 2 or the FAA Regional Frequency Management Officers.

VI. TRAINING

At least once a year, if funds are available, the three agencies agree to plan and participate in a joint exercise pertaining to "Phantom Controller" activities. This exercise will be held during the month of August of each year, unless an actual operation has occurred during the year.

VII. ENTIRE AGREEMENT/MODIFICATION OF AGREEMENT

This agreement becomes effective on the date of the last signature to the agreement. This agreement constitutes the entire understanding of the parties with respect to the subject matter hereof, supersedes all existing agreements among them concerning such subject matter, and may be amended only by a written modification duly executed by each party or authorized representative of each party.

VIII. EFFECTIVE DATE

This Agreement is effective on the latest date of signature of the parties below and remains in effect unless superseded or rescinded, in writing, by any party hereto.

APPROVED:

Federal Communications Commission

By:

Joseph P. Casey
Deputy Chief
Compliance and Information Bureau

Date: August 8, 1996

Department of Transportation Federal Aviation Administration

By:

Stanley Rivers
Acting Director, Airway Facilities

Date: July 3, 1996

Department of Justice Federal Bureau of Investigation

By:

William J. Esposito
Assistant Director, Criminal
Investigative Division

Date: July 19, 1996